

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended): An aqueous sizing ~~Sizing~~ composition for insulation products based on mineral wool, comprising [[an]] a water-dispersible or water-emulsifiable epoxy resin of a glycidyl ether, [[and]] an amine hardener, and further includes an accelerator selected from the group consisting of imidazoles, imidazolines and mixtures thereof.

2. (Currently Amended): The composition according to claim 1, wherein [[an]] the accelerator is selected from the group consisting of imidazole, 1-methylimidazole, 2-methylimidazole, 2-phenylimidazole, 2-ethyl-4-methyl-imidazole, 4,4'-methylenebis (2-ethyl-5-methylimidazole) [[or]] and 2-ethyl-N-phenylimidazoline.

3. (Previously Presented): The composition according to claim 1, wherein the epoxy resin is prepared by the reaction of epichlorohydrin with an alcohol.

4. (Currently Amended): The composition according to claim 1, wherein the resin has an ~~EEW (Epoxy Equivalent Weight)~~ Epoxy Equivalent Weight of between 150 and 2000.

5. (Previously Presented): The composition according to claim 1, wherein the epoxy resin has a water dilutability, at 20°C, of at least 500%.

6. (Currently Amended): The composition according to claim 1, wherein the hardener is selected from the group consisting of aliphatic polyamines, ~~such as diethylenetriamine, triethylenetetramine, tetraethylene-pentamine, and polyglycoldiamines,~~

cycloaliphatic polyamines, ~~such as 1,3bis(aminomethyl) cyclohexane, 4,4-diaminocyclohexylmethane, methylenediamine and 2,4-diaminocyclohexanol,~~ and aromatic polyamines, ~~such as m-phenylenediamine, m-xylylenediamine, diethyltoluenediamine, diaminodiphenylsulphone and dieyandiamine.~~

7. (Currently Amended): The composition according to claim 1, wherein the accelerator is present in an amount of 0.1 to 5 parts by weight of dry matter per 100 parts by weight of dry matter of epoxy resin/hardener.

8. (Previously Presented): The composition according to claim 1, wherein the hardener has an amine equivalent weight/H ratio of 20 to 300.

9. (Currently Amended): The composition according to claim 1, which includes the following additives, per 100 parts by weight of dry matter of resin/hardener: [[0]] up to 2 parts, of a coupling agent ~~such as a silane;~~ and/or [[0]] up to 20 parts, of an oil.

10. (Currently Amended): A process for manufacturing a thermal and/or acoustic insulation product, based on mineral wool, comprising the steps of: a) forming mineral fibres ~~formed are~~ from a molten mineral composition; b) spraying a sizing composition according to claim 1 onto the fibres obtained at a); c) collecting the fibres in the form of a sheet; and d) subjecting the sheet to a heat treatment at a temperature below about 260°C.

11. (Previously Presented): The process according to claim 10, wherein an accelerator is mixed with the other constituents of the size before being spraying onto the fibres.

12. (Previously Presented): The process according to claim 10, wherein an accelerator is applied separately from the spraying of the other constituents of the size onto the fibres.

13. (Previously Presented): A thermal and/or acoustic insulation product based on mineral wool, prepared with a sizing composition according to claim 1.

14. (Currently Amended): The insulation product according to claim 13, ~~wherein the total weight of cured binder is from 0.5 to 15%~~ cured binder.

15. (Currently Amended): The insulation product according to claim 13, which includes a veil of mineral fibres, having a weight of between 10 and 300 g/m², placed on at least one of the external faces of the said product, ~~wherein and in that the~~ said veil comprises at least 1% by weight of cured binder obtained from the sizing composition.

16. (Currently Amended): A method ~~using the sizing composition according to claim 1~~ for improving the mechanical strength after aging, ~~especially in a wet environment~~, of an insulation product[[s]] based on mineral wool comprising applying the sizing composition according to claim 1 to the insulation product.

17. (Previously Presented): The method of claim 15, wherein the wool is glass wool or rock wool.

18. (Currently Amended): The composition of claim 4 wherein the [[EEW]] Epoxy Equivalent Weight has maximum value of 300.

19. (New): The composition according to claim 1, wherein the hardener is selected from the group consisting of diethylenetriamine, triethylenetetramine, tetraethylene-pentamine, 1,3bis(aminomethyl) cyclohexane, 4,4-diaminocyclohexylmethane, methylenediamine, 2,4-diaminocyclohexanol, m-phenylenediamine, m-xylylenediamine, diethyltoluenediamine, diaminodiphenylsulphone, dicyandiamine, and mixtures thereof.

20. (New): The composition according to claim 1, wherein the composition is sprayable.